participating institutions achieve very high research activity status.

(e) REPORT ON IMPROVING THE RESEARCH CAPACITY AT HIGH RESEARCH ACTIVITY HISTORICALLY BLACK COLLEGES OR UNIVERSITIES.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this division, the National Science and Technology Council shall prepare and submit a report that—

(A) identifies challenges and barriers to Federal research grants for high research activity status Historically Black Colleges or Universities; and

(B) identifies recommendations for Federal science agencies to sustainably boost the research capacity of high research activity status Historically Black Colleges or Universities through grant-making authorities.

(2) REPORT SUBMISSION.—The National Science and Technology Council shall transmit the report to the Director of the National Science Foundation, the Administrator of the National Aeronautics and Space Administration, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Defense, the Secretary of Energy, the Secretary of Health and Human Services, and the heads of other such agencies as determined relevant by the National Science and Technology Council.

(3) INFORMATION FROM FEDERAL AGENCIES.—

(A) IN GENERAL.—The National Science and Technology Council may secure directly from a Federal department or agency such information as the National Science and Technology Council considers necessary to carry out the report under this subsection.

(B) FURNISHING INFORMATION.—Upon a request from the National Science and Technology Council, the head of a Federal department or agency shall furnish such information as is requested to the National Science and Technology Council.

(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Foundation, for awards under this section, $200,000,000 for fiscal year 2022 and each year thereafter.

SA 1795. Mr. DURBIN submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 2116 and insert the following:

SEC. 2116. AUTHORIZATION OF APPROPRIATIONS FOR THE FOUNDATION.

(a) FISCAL YEAR 2022.—

(1) FOUNDATION.—There is authorized to be appropriated to the Foundation $12,269,200,000 for fiscal year 2022.

(2) SPECIFIC NSF ALLOCATIONS.—Of the amount authorized under paragraph (1)—

(A) $10,469,200,000 shall be made available to carry out the activities of the Foundation outside of the Directorate, of which $800,000,000 shall be for STEM education and related activities, including workforce activities under section 2202; and

(B) $1,800,000,000 shall be made available to the Directorate, of which—

(i) $594,000,000 shall be for the innovation centers under section 2104;

(ii) $324,000,000 shall be for scholarships, fellowships, and other activities under section 2106;

(iii) $252,000,000 shall be for academic technology transfer under section 2109;

(iv) $180,000,000 shall be for test beds under section 2108;

(v) $270,000,000 shall be for research and development activities under section 2107; and

(vi) an amount equal to 10 percent of the total made available to the Directorate under this subparagraph shall be transferred to the Foundation for collaboration with directorates and offices of the Foundation outside of the Directorate as described under section 2102(c)(7).

(b) FISCAL YEAR 2023.—

(1) FOUNDATION.—There is authorized to be appropriated to the Foundation $14,368,000,000 for fiscal year 2023.

(2) SPECIFIC NSF ALLOCATIONS.—Of the amount authorized under paragraph (1)—

(A) $11,168,000,000 shall be made available to carry out the activities of the Foundation outside of the Directorate, of which $1,190,000,000 shall be for STEM education and related activities, including workforce activities under section 2202; and

(B) $3,200,000,000 shall be made available to the Directorate, of which—

(i) $1,056,000,000 shall be for the innovation centers under section 2104;

(ii) $576,000,000 shall be for scholarships, fellowships, and other activities under section 2106;

(iii) $448,000,000 shall be for academic technology transfer under section 2109;

(iv) $320,000,000 shall be for test beds under section 2108;

(v) $480,000,000 shall be for research and development activities under section 2107; and

(vi) an amount equal to 10 percent of the total made available to the Directorate under this subparagraph shall be transferred to the Foundation for collaboration with directorates and offices of the Foundation outside of the Directorate as described under section 2102(c)(7).

(c) FISCAL YEAR 2024.—

(1) FOUNDATION.—There is authorized to be appropriated to the Foundation $18,198,200,000 for fiscal year 2024.

(2) SPECIFIC NSF ALLOCATIONS.—Of the amount authorized under paragraph (1)—

(A) $11,898,200,000 shall be made available to carry out the activities of the Foundation outside of the Directorate, of which $1,600,000,000 shall be for STEM education and related activities, including workforce activities under section 2202; and

(B) $6,300,000,000 shall be made available to the Directorate, of which—

(i) $2,079,000,000 shall be for the innovation centers under section 2104;

(ii) $1,134,000,000 shall be for scholarships, fellowships, and other activities under section 2106;

(iii) $882,000,000 shall be for academic technology transfer under section 2109;

(iv) $630,000,000 shall be for test beds under section 2108;

(v) $945,000,000 shall be for research and development activities under section 2107; and

(vi) an amount equal to 10 percent of the total made available to the Directorate under this subparagraph shall be transferred to the Foundation for collaboration with directorates and offices of the Foundation outside of the Directorate as described under section 2102(c)(7).

(d) FISCAL YEAR 2025.—

(1) FOUNDATION.—There is authorized to be appropriated to the Foundation $21,061,900,000 for fiscal year 2025.

(2) SPECIFIC NSF ALLOCATIONS.—Of the amount authorized under paragraph (1)—

(A) $12,661,900,000 shall be made available to carry out the activities of the Foundation outside of the Directorate, of which $2,100,000,000 shall be for STEM education and related activities, including workforce activities under section 2202; and

(B) $8,400,000,000 shall be made available to the Directorate, of which—

(i) $2,772,000,000 shall be for the innovation centers under section 2104;

(ii) $1,512,000,000 shall be for scholarships, fellowships, and other activities under section 2106;

(iii) $1,176,000,000 shall be for academic technology transfer under section 2109;

(iv) $840,000,000 shall be for test beds under section 2108;

(v) $1,260,000,000 shall be for research and development activities under section 2107; and

(vi) an amount equal to 10 percent of the total made available to the Directorate under this subparagraph shall be transferred to the Foundation for collaboration with directorates and offices of the Foundation outside of the Directorate as described under section 2102(c)(7).

(e) FISCAL YEAR 2026.—

(1) FOUNDATION.—There is authorized to be appropriated to the Foundation $22,562,520,000 for fiscal year 2026.

(2) SPECIFIC NSF ALLOCATIONS.—Of the amount authorized under paragraph (1)—

(A) $13,262,520,000 shall be made available to carry out the activities of the Foundation outside of the Directorate, of which $2,540,000,000 shall be for STEM education and related activities, including workforce activities under section 2202; and

(B) $9,300,000,000 shall be made available to the Directorate, of which—

(i) $3,069,000,000 shall be for the innovation centers under section 2104;

(ii) $1,674,000,000 shall be for scholarships, fellowships, and other activities under section 2106;

(iii) $1,302,000,000 shall be for academic technology transfer under section 2109;

(iv) $930,000,000 shall be for test beds under section 2108;

(v) $1,395,000,000 shall be for research and development activities under section 2107; and

(vi) an amount equal to 10 percent of the total made available to the Directorate under this subparagraph shall be transferred to the Foundation for collaboration with directorates and offices of the Foundation outside of the Directorate as described under section 2102(c)(7).

(f) ALLOCATION AND LIMITATIONS.—

(1) ALLOCATION FOR THE OFFICE OF INSPECTOR GENERAL.—From any amounts appropriated for the Foundation for a fiscal year, the Director shall allocate for necessary expenses of the Office of Inspector General of the Foundation an amount of not less than $33,000,000 in any fiscal year for oversight of the programs and activities funded under this section in accordance with the Inspector General Act of 1978 (5 U.S.C. App.).

(2) SUPPLEMENT AND NOT SUPPLANT.—The amounts authorized to be appropriated under this section shall supplement, and not supplant, any other amounts previously appropriated to the Office of the Inspector General of the Foundation.

(3) NO NEW AWARDS.—The Director shall not make any new awards for the activities under the Directorate for any fiscal year in which the total amount appropriated to the Foundation (not including amounts appropriated for the Directorate) is less than the total amount appropriated to the Foundation (not including such amounts), adjusted by the rate of inflation, for the previous fiscal year.

(4) NO FUNDS FOR CONSTRUCTION.—No funds provided to the Directorate under this section shall be used for construction.

SA 1796. Mr. DURBIN (for himself and Ms. MURKOWSKI) submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 2214 and insert the following:

SEC. 2214. CRITICAL MINERALS MINING, RECYCLING, AND ALTERNATIVE TECHNOLOGIES RESEARCH.

(a) CRITICAL MINERALS MINING, RECYCLING, AND ALTERNATIVE TECHNOLOGIES RESEARCH AND DEVELOPMENT AT THE FOUNDATION.—

(1) IN GENERAL.—In order to support supply chain resiliency and reduce the environmental impacts of critical minerals mining, the Director shall issue awards, on a competitive basis, to institutions of higher education, nonprofit organizations, or National Laboratories (or consortia of such institutions or organizations, including consortia that collaborate with private industry) to support basic research that will accelerate innovation to advance critical minerals mining, recycling, and reclamation strategies and technologies for the purpose of making better use of domestic resources, finding alternative technologies, and eliminating national reliance on minerals and mineral materials that are subject to supply disruptions.

(2) USE OF FUNDS.—Activities funded by an award under this section may include—

(A) advancing mining research and development activities to develop new mapping and mining technologies and techniques, including advanced critical mineral extraction and production, to improve existing or to develop new supply chains of critical minerals, and to yield more efficient, economical, and environmentally benign mining practices;

(B) advancing critical mineral processing research activities to improve separation, alloying, manufacturing, or recycling techniques and technologies that can decrease the energy intensity, waste, potential environmental impact, and costs of those activities;

(C) advancing research and development of critical minerals mining and recycling technologies that take into account the potential end-uses and disposal of critical minerals, in order to improve end-to-end integration of mining and technological applications;

(D) conducting research and development on alternative technologies, such as in battery or energy storage technologies that minimize or do not incorporate critical minerals;

(E) conducting long-term earth observation of reclaimed mine sites, including the study of the evolution of microbial diversity at such sites;

(F) examining the application of artificial intelligence for geological exploration of critical minerals, including what size and diversity of data sets would be required;

(G) examining the application of machine learning for detection and sorting of critical minerals, including what size and diversity of data sets would be required;

(H) conducting detailed isotope studies of critical minerals and the development of more refined geologic models; or

(I) providing training and research opportunities to undergraduate and graduate students to prepare the next generation of mining engineers and researchers.

(b) CRITICAL MINERALS INTERAGENCY SUBCOMMITTEE.—

(1) IN GENERAL.—In order to support supply chain resiliency, the Critical Minerals Subcommittee of the National Science and Technology Council (referred to in this subsection as the ''Subcommittee'') shall coordinate Federal science and technology efforts to ensure secure and reliable supplies of critical minerals to the United States.

(2) PURPOSES.—The purposes of the Subcommittee shall be—

(A) to advise and assist the Committee on Homeland and National Security and the National Science and Technology Council on United States policies, procedures, and plans as it relates to critical minerals, including—

(i) Federal research, development, and deployment efforts to optimize methods for extractions, concentration, separation, and purification of conventional, secondary, and unconventional sources of critical minerals, including research that prioritizes end-to-end integration of mining and recycling techniques and the end-use target for critical minerals;

(ii) efficient use and reuse of critical minerals, including recycling technologies for critical minerals and the reclamation of critical minerals from components such as spent batteries;

(iii) research, development, and deployment of materials and technologies that can be used in place of technologies utilizing critical minerals, such as battery or energy storage technologies that minimize or do not incorporate critical minerals;

(iv) addressing the technology transitions between research or lab-scale mining and recycling and commercialization of these technologies;

(v) the critical minerals workforce of the United States; and

(vi) United States private industry investments in innovation and technology transfer from federally funded science and technology;

(B) to identify emerging opportunities, stimulate international cooperation, and foster the development of secure and reliable supply chains of critical minerals, including activities related to the reclamation of critical minerals via recycling and research and development of alternative technologies;

(C) to ensure the transparency of information and data related to critical minerals; and

(D) to provide recommendations on coordination and collaboration among the research, development, and deployment programs and activities of Federal agencies to promote a secure and reliable supply of critical minerals necessary to maintain national security, economic well-being, and industrial production.

(3) RESPONSIBILITIES.—In carrying out paragraphs (1) and (2), the Subcommittee may, taking into account the findings and recommendations of relevant advisory committees—

(A) provide recommendations on how Federal agencies may improve the topographic, geologic, and geophysical mapping of the United States and improve the discoverability, accessibility, and usability of the resulting and existing data, to the extent permitted by law and subject to appropriate limitation for purposes of privacy and security;

(B) assess the progress toward developing critical minerals recycling and reprocessing technologies, and alternative technologies;

(C) assess the end-to-end lifecycle of critical minerals, including for mining, usage, recycling, and end-use material and technology requirements;

(D) examine options for accessing and developing critical minerals through investment and trade with allies and partners of the United States and provide recommendations;

(E) evaluate and provide recommendations to incentivize the development and use of advances in science and technology in the private industry;

(F) assess the need for and make recommendations to address the challenges the United States critical minerals supply chain workforce faces, including—

(i) aging and retiring personnel and faculty;

(ii) public perceptions about the nature of mining and mineral processing; and

(iii) foreign competition for United States talent;

(G) develop, and update as necessary, a strategic plan to guide Federal programs and activities to enhance—

(i) scientific and technical capabilities across critical mineral supply chains, including a roadmap that identifies key research and development needs and coordinates ongoing activities for source diversification, more efficient use, recycling, and alternative technologies; and

(ii) cross-cutting mining science, data science techniques, materials science, manufacturing science and engineering, computational modeling, and environmental health and safety research and development; and

(H) report to the appropriate committees of Congress on activities and findings under this subsection.

(4) MANDATORY RESPONSIBILITIES.—In carrying out paragraphs (1) and (2), the Subcommittee shall, taking into account the findings and recommendations of the relevant advisory committees, identify and evaluate Federal policies and regulations that restrict the mining of critical minerals.

(c) GRANT PROGRAM FOR DEVELOPMENT OF CRITICAL MINERALS AND METALS .—

(1) ESTABLISHMENT.—The Secretary of Commerce, in consultation with the Director, the Secretary of the Interior, and the heads of other relevant Federal agencies, shall establish a grant program to finance pilot projects for the development of critical minerals and metals mining, recycling, and alternative technologies research and development in the United States.

(2) LIMITATION ON GRANT AWARDS.—A grant awarded under paragraph (1) may not exceed $10,000,000.

(3) ECONOMIC VIABILITY.—In awarding grants under paragraph (1), the Secretary of Commerce shall give priority to projects that the Secretary of Commerce determines are likely to be economically viable over the long term.

(4) SECONDARY RECOVERY.—In awarding grants under paragraph (1), the Secretary of Commerce shall seek to award not less than 30 percent of the total amount of grants awarded during the fiscal year for projects relating to secondary recovery of critical minerals and metals.

(5) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of Commerce $100,000,000 for each of fiscal years 2021 through 2024 to carry out the grant program established under paragraph (1).

(d) DEFINITIONS.—In this section:

(1) ALTERNATIVE TECHNOLOGIES.—The term ''alternative technologies'' means the development of substitute materials that can substantially satisfy the metrics of the end-use application by either significantly minimizing or completely eliminating the need for critical minerals.

(2) CRITICAL MINERAL; CRITICAL MINERAL OR METAL.—The terms ''critical mineral'' and ''critical mineral or metal'' include any host